J. L. MOTT.

Stove.

No. 508.

Patented Dec. 7, 1837.

Fig: 1.

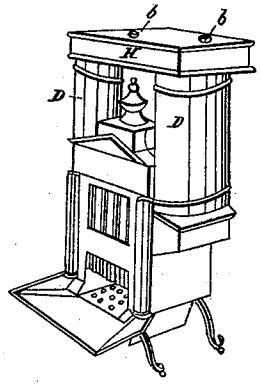


Fig: 2.

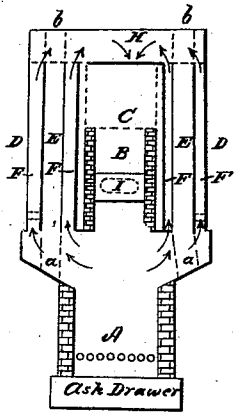


Fig: 3.

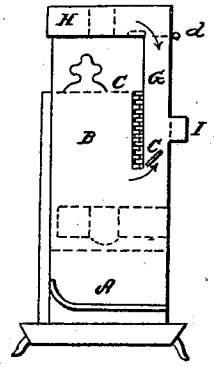


Fig: 4.

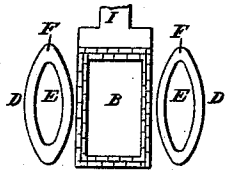
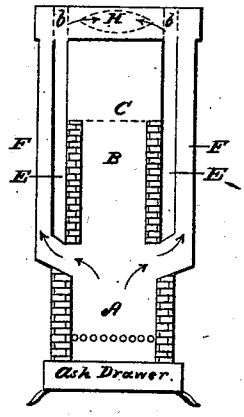


Fig: 5.



UNITED STATES PATENT OFFICE.

JORDAN L. MOTT, OF NEW YORK, N. Y.

PARLOR-STOVE.

Specification of Letters Patent No. 508, dated December 7, 1837.

To all whom it may concern:

Be it known that I, JORDAN L. MOTT, of the city of New York, State of New York, have invented an Improved Parlor-Stove, which is furnished with air-heaters so constructed as to economize fuel and to supply air of genial warmth, which is not deteriorated in its passage through the heating-flues; and I do hereby declare that the following is a full and exact description thereof.

Figure 1, in the accompanying drawing, is a perspective view of the stove. Fig. 2 is a vertical section through the middle thereof parallel with its front; and Fig. 3, is a vertical section from front to back, through the middle.

In each of the figures like parts are designated by the same letters of reference.

A, is the grate, or fire chamber, which is surmounted by B, a reservoir for coal, which has a close fitting cover at C, allowing a considerable quantity of fuel to be supplied at once, and to burn out gradually.

D, D, are the combined flues and air heaters, consisting of one cylinder, or rather coal tube, or chamber, within another, the innermost being the air chamber, and the space between it and the outermost, the smoke flue.

E, E, Fig. 2 &c. are sections of the inner, or air, flues, and F, F, the spaces surrounding them, and forming the smoke flues. Air is admitted into the interior, or air flue, at its lower end, through tubes, or apertures, leading into it, in any convenient way, as at the part represented by the dotted lines *a*, *a*. These tubes or apertures, may be extended, if preferred, so as to admit air from without the room, but this will seldom be found necessary. The air which is heated in passing through the tubes, escapes into the room through openings at *b*, *b*, in the top of the stove.

The direction of the draft, or passage, for smoke and heated air from the fire, is represented by arrows. There are, as in many other stoves, two directions for the escape of the smoke &c.; one directly to the escape pipe, and the other by a more circuitous route, which is to be used after the fuel has become perfectly ignited. There is a flat flue, G, extending up from the fire-place to the chamber H, at the top of the stove. In this flat flue there are two valves, or dampers, *c*, and *d*, by which the draft is governed. L, is the escape pipe for smoke, and into which it passes directly, when *c* is opened and *d* closed; but when these valves are reversed, the draft is carried through the flues surrounding the air-tubes, and down the flue G, to the escape pipe. Fig. 4 is a horizontal section of the stove at the level of the escape pipe, the parts of which figure are designated by their proper letters of reference. By this arrangement of the flues, and of the air tubes within them, the exterior, or shell, of the stove is directly heated by the heated air, and a free radiation takes place into the room. Fig. 5, shows a modification of the stove, in which the smoke flues do not entirely surround the air flues, the latter being heated directly, on the side toward the reservoir B, but still through the intermedium of the brick lining, which, wherever it is represented, is colored red. In other respects, the construction of this stove is identical with that before described.

Having thus fully shown the manner in which I construct and arrange the several parts of this stove, it is to be distinctly understood that I do not intend to claim the individual parts, generally, as my invention, they having been previously known and used. All that I claim as new and for which I ask Letters Patent, is—

The air chambers or tubes, surrounded in whole or in part by the smoke flues in the manner and located as herein described, in combination with the side openings or apertures, that connect the smoke flues F, F, with the fire chamber, whether said openings be under or above the surface of fuel, and this I claim whether combined with a stove such as that herein represented, or to one of any other construction, to which such side flues so arranged and combined, can be advantageously appended, it being further understood that I make no claim to air tubes surrounded by the smoke flues, when placed immediately above the fire chamber.

JORDAN L. MOTT.

Witnesses:

LAWR. S. MOTT,

STEPHEN HICKS.